

The Unmanned Aircraft Systems Program: Ongoing Activities in Support of NOAA Priorities

Gary Wick
OAR/ESRL/PSD

ABSTRACT

The Unmanned Aircraft Systems (UAS) Program seeks to facilitate the integration of UAS observations into the NOAA observing system. Specific program goals include serving as the NOAA subject matter experts for UAS technology and observations, and assisting with the development, evaluation, and transition to application of select UAS observing strategies. Three scientific focus areas have been identified including high impact weather, marine monitoring, and polar monitoring. Ongoing major activities in support of these goals include initiation of the Sensing Hazards with Operational Unmanned Technology (SHOUT) project exploring the impact of UAS observations on forecasts of high-impact weather events, sustained observations of river basins to address identified River Forecast Center priorities, and multiple demonstrations in collaboration with groups within the National Marine Fisheries Service. An important component of these projects is active involvement with operational partners to help assess the impact of the observations and facilitate potential future transitions. A program review in 2015 provided the opportunity to interact with stakeholders throughout the agency and obtain guidance on future research priorities. Based on multiple inquiries, one emerging topic under consideration for new missions is enhanced observations of atmospheric boundary layers in support of improved forecasting.